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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,619	03/13/2000		Yasuyuki Yoshimura	13041,3US01	6818
72?7	7590	11/17/2003		EXAMINER	
HOWARD			SHOSHO, CALLIE E		
C/O STOLL, MISKIN, & BADIE THE EMPIRE STATE BUILDING				ART UNIT	PAPER NUMBER
350 FIFTH A NEW YORK				1714	
INDW YORK	., 141 1011			DATE MAILED: 11/17/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
Office Action Summary	09/523,619	YOSHIMURA ET AL.						
Office Action Summary	Examiner	Art Unit						
The MAN INC DATE of this	Callie E. Shosho	1714						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI  Extensions of time may be available under the provisions of 37 Cl after SIX (8) MONTHS from the mailing date of this communicati  If the period for reply specified above is less than thirty (30) days,  If NO period for reply is specified above, the maximum statutory p  Failure to reply within the set or extended period for reply will,  Any reply received by the Office later than three months after the samed patent term adjustment. See 37 CFR 1.704(b).  Status	ON.  FR 1.136(a). In no event, however, may a re in. in. a reply within the statutory minimum of thirty eriod will apply and will expire SIX (6) MONT statute. Cause the application to become AB/statute. cause the application to become AB/statute.	ply be timely filed  (30) days will be considered timely. HS from the mailing date of this communication, NDONEO (35 U.S.C. \$ 130.						
1) Responsive to communication(s) filed on :	27 August 2003.							
2a)⊠ This action is <b>FINA</b> L. 2b)⊡ <sup>1</sup>	This action is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4) Claim(s) 1,3,5,9,11,13,15-20 and 22-56 is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6) Claim(s) <u>1,3,5,9,11,13,15-20 and 22-56</u> is/are rejected.								
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9)☐ The specification is objected to by the Examiner.								
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. §§ 119 and 120								
12)								
Notice of References Cited (PTO-892)	4) Interview Su	mmary (PTO-413) Paper No(s)						
Notice of Draftsperson's Patent Drawing Review (PTO-948     Information Disclosure Statement(s) (PTO-1449) Paper No	) 5) Notice of Info	ormal Patent Application (PTO-152)						

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### **DETAILED ACTION**

 All outstanding rejections except for those described below are overcome by applicants' amendment filed 8/27/03.

The new grounds of rejection as set forth below are necessitated by applicants' amendment and thus, the following action is final.

## Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 1, 3, 5, 9, 11, 13, and 15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1 and 3 have been amended to recite glass flake coated with metal "having a smooth surface". It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of the above cited phrase in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed.

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## Claim Rejections - 35 USC § 103

- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 5. Claims 1, 3, 5, 9, 11, 22-24, and 28-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7118592 in view of Yolles (U.S. 3,053,683) and EP 600625.

JP 7118592 discloses a water-based metallic gloss ink for ball point pens comprising 5-20 wt% pearl pigment which has diameter of 5-60 μm, water-soluble resin including polysaccharide such as xanthan gum, 5-40% water-soluble solvent, pigment, and water. The ink has a viscosity of 10,000-150,000 cPs (paragraphs 7-12). From example 1, it is calculated that the ink comprises, for example, 1% water-soluble resin. Further, it is disclosed that the ball point pen comprises hollow ink container wherein the above ink is stored and there is also disclosed a method of using the above ink in this ball point pen (paragraph bridging pages 10-11)

The difference between JP 7118592 and the present claimed invention is the requirement in the claims of (a) glass flake and (b) amount of pigment.

With respect to difference (a), Yolles disclose smooth metal coated glass flake suitable for use in coating compositions for substrates such as paper, i.e. ink, in order to produce a glittery finish (col.1, lines 10-13 and 24-28, col.2, line 15, col.3, lines 54-59, and col.8, line 14) wherein the metal coated glass flakes have average diameter of 140-325 mesh, i.e. 4-100  $\mu$ m (col.6, lines 47-49).

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In light of the motivation of using glass flakes disclosed by Yolles as described above, it therefore would have been obvious to one of ordinary skill in the art to use glass flakes in JP 7118592 in order to produce an ink with a glittery finish, and thereby arrive at the claimed invention.

With respect to difference (b), it is noted that paragraph 12 of JP 7118952 discloses the use of colorant such as pigment, however, there is no disclosure of how much pigment is utilized.

On the one hand, it would have been within the skill level of, as well as obvious to, one of ordinary skill in the art to choose amounts of pigment, including that presently claimed, in order to adjust the hue, color, and optical density of the ink to the desired level, and thereby arrive at the claimed invention.

On the other hand, EP 600205, which is drawn to ink for writing instrument similar to that disclosed by JP 7118952, discloses the use of 0.1-10% pigment (page 3, lines 15-16).

In light of the motivation for using specific amount of pigment disclosed by EP 600205 as described above, it therefore would have been obvious to one of ordinary skill in the art to use colorant in such amount in the ink of JP 7118592 order to produce ink with desired color, hue, etc. and thereby arrive at the claimed invention.

6. Claims 15-20, 25-27, and 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7118952 in view of Yolles and EP 600625 as applied to claims 1, 3, 5, 9, 11, 22-24, and 28-36 above, and further in view of Morita et al. (U.S. 6,099,629).

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The difference between JP 7118592 in view of Yolles and EP 600625 and the present claimed invention is the requirement in the claims of resin emulsion binder.

Morita et al., which is drawn to ink for writing instrument, disclose the use of 1-10% (in terms of solid content) resin emulsion including anionic resin emulsion wherein the resin emulsion possesses minimum film forming temperature of less than 5 °C. The resins include styrene-acryl copolymer, polyvinyl acetate, and acryl resin. The motivation for using such resin emulsion is to control the stickiness and drying of the ink (col.5, lines 25-29, col.6, lines 34-50, and col.13, lines 47-51).

In light of the motivation for using resin emulsion disclosed by Morita et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such resin emulsion in the ink of JP 7118952 in order to control the stickiness and drying of the ink, and thereby arrive at the claimed invention.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7118952 in view of Yolles and EP 600625 as applied to claims 1, 3, 5, 9, 11, 22-24, and 28-36 above, and further in view of Whyzmuzis (U.S. 5,714,526).

The difference between JP 7118952 in view of Yolles and EP 600625 and the present claimed invention is the requirement in the claims of opacifying pigment.

Whyzmuzis, which is drawn to ink composition, discloses the use of opacifying pigment (col.7, lines 4-10) in order to produce an ink with good optical density.

In light of above, it therefore would have been obvious to one of ordinary skill in the art to use such pigment in the ink of JP 7118952 in order to produce an ink with good optical density, and thereby arrive at the claimed invention.

8. Claims 43-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7118952 in view of Yolles (U.S. 6,053,683), Morita et al. (U.S. 6,099,629), and EP 600625.

The rejection is adequately set forth in paragraph 8 of the office action mailed 2/26/03 and is incorporated here by reference.

9. Claims 50-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 7118592 in view of Yolles (U.S. 6,053,683) and Morita et al. (U.S. 6,099,629).

The rejection is adequately set forth in paragraph 9 of the office action mailed 2/26/03 and is incorporated here by reference.

#### Response to Arguments

 Applicants' arguments filed 8/27/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that:

- (a) there is no disclosure in JP 7118592 of coloring pigment.
- (b) There is no motivation to combine JP 7118592 with Yolles.

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- (c) The minimum value of the medium diameter of glass flake as set forth in claim 3 is 25  $\mu$ m while JP 7118592 disclose that the maximum value of the particle diameter of the pearlescent pigment is 20  $\mu$ m.
- (d) There is no motivation to combine JP 7118592 with Morita et al. given that Morita et al. do not disclose or suggest using resin emulsion as fixing agent as required in the present claims.
  - (e) None of the cited references disclose claimed structure of writing tools.
  - (f) There is no disclosure in Yolles that the glass flake has smooth surface.

With respect to argument (a), it is noted that paragraph 12 of JP 7118592 discloses the use of either dye or pigment in addition to the pearl pigment.

With respect to argument (b), applicants argue that JP 7118592 produces written mark having metal luster color and would not motivate one of to produce presently claimed ink in which glittering pieces, i.e. glass flake coated with metal, are scattered among, for example, blue ground color, i.e. coloring pigment.

However, it is noted that the motivation for combining JP 7118592 with Yolles is found in Yolles which discloses that glass flakes are suitable for use in "other products" employing pearl essence pigments. There is no limitation on what these other products encompass. Thus, it would have been obvious to one of ordinary skill in the art to use the metal coated glass flakes of

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Yolles in the ink of JP 7118592, which utilizes pearl essence pigment. As disclosed by Yolles, the motivation for using such metal coated glass flakes is to impart glittery feeling.

Although Yolles was published in 1962, as set forth in MPEP 2143.02, "prior art can be modified or combined to reject claims as *prima facie* obvious as long as there is a reasonable expectation of success", *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Given that Yolles disclose using metal coated glass flakes in place of pearl essence pigments and given that JP 7118592 discloses ink comprising pearl pigments, it is the examiner's position that there is proper motivation to combine JP 7118592 with Yolles and that a *prima facie* case of obviousness has been established.

Applicants also argue that Yolles do not disclose use of glass flakes in inks or writing tools but rather as coatings for paper.

It is agreed that there is no explicit disclosure in Yolles that the glass flakes are used in inks or writing tools. However, the disclosure that the glass flakes are useful for providing a glittery finish on articles made from a variety of substrates including paper is significant because the disclosure teaches that the glass flakes of Yolles are capable of producing glittery finish on paper which is pertinent to the present invention given that inks are a type of coating on paper.

It is agreed that JP 7118592 and Yolles do disclose different pigment, i.e. JP 7118592 discloses pearl pigment with no metal coating while Yolles discloses glass flake pigment with metal coating. However, it is Yolles itself which provides the motivation for using glass flake pigments as presently claimed in place of pearl pigments as disclosed by JP 7118592. Yolles' teaching that metal coated glass flakes are used in or on other products employing pearl essence

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pigments provides motivation to one of ordinary skill in the art to use metal coated glass flake in the ink of JP 7118592.

Applicants argue that the examiner admitted in the previous office action mailed 2/26/03, that the use of glass flakes is unsatisfactory in inks due to blur, unsmoothness, and clogging of the writing tool.

However, it is noted that in response to applicants' arguments set forth on pages 17-18 of the amendment filed 10/15/02 that glass flakes provide unsatisfactory inks due to blurs and unsmoothness appearing in the written letters and further results in clogging of the pen in the course of writing, examiner responded in paragraph (g) on page 14 of the office action mailed 2/26/03, that while it "may" be well known that glass flakes provide unsatisfactory inks due to blurs or unsmoothness appearing in the written letters and further results in clogging of the pen in the course of writing, this would not prevent one of skill in the art from using glass flakes disclosed by Yolles in inks for writing instrument especially those which are of the same size as those presently claimed and are known to be used in place of pearl essence pigments which are conventionally used in inks for writing instruments. That is, given the motivation for using the metal coated glass flakes disclosed by Yolles and further given that the glass flakes possess size identical to that presently claimed so that the glass flake would not clog the writing instrument, it is the examiner's position that it therefore would have been obvious to one of ordinary skill in the art to use the glass flakes of Yolles in the ink of JP 07110592.

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With respect to argument (c), it is noted that JP 7118592 discloses the use of pearlescent pigment which has average particle diameter of 5-60  $\mu m$  which overlaps the median diameter set forth in present claim 3.

With respect to argument (d), applicants argue that Morita et al. do not disclose that the resin emulsion is used as a component to fix glass flake to written mark but rather is utilized as viscosity modifier.

However, it is noted that Morita et al. disclose the use of resin emulsion in order to control the sticking property and drying of the ink not the viscosity of the ink. Morita et al. disclose the use of thickener in order to obtain suitable viscosity. Further, given that Morita et al. disclose resin emulsion identical to that presently claimed, it is clear that the resin emulsion would intrinsically function as a binder.

With respect to argument (e), it is noted that JP 7118592 discloses using the ink in ball point pen and further discloses that the ball point pen consists of hollow cylinder filled with ink and ball point pen tip (paragraphs bridging pages 10-11) which meets the requirements of the present claims regarding the writing tool.

With respect to argument (f), it is noted that the present claims require glass flake pigment having a smooth surface. Given that col.1, lines 33-35 disclose that the glass flake coated with metal is smooth, it is clear that Yolles meets this requirement. Applicants argue that Yolles do not disclose that the corner or edges of the flake is smooth. However, there is no

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requirement in the present claims that the glass flake pigment has smooth corners or edges. Further, given that Yolles et al. disclose that the glass flake is smooth, it is the examiner' position, absence evidence to the contrary, that this would include the corners or edges of the glass flake.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho Primary Examiner Art Unit 1714

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CS 11/12/03